

### REMARKS

Claims 1-58 are pending in the application. Non-elected claims 59-96 have been withdrawn by the Examiner.

Claims 1, 12, 25 and 36 presently stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. Amended claims 1 and 25 recite that the "mirror includes a convex reflective surface symmetric about the axis, the surface forming a first angle C with respect to a first plane perpendicular to the axis substantially at a point of intersection between the axis and the mirror, the first angle C being at least about 0.5°". Support for the minimum of "about 0.5°" can be found, for example, on page 12 lines 21-23 of Applicants' specification. The language "substantially" at a point of intersection has been added to claims 1 and 25 to account for mirrors that either come to a sharp tip at a single point, or have a slightly rounded tip. It is submitted that claims 1 and 25 meet the requirements of 35 U.S.C. § 112, first paragraph.

Claims 12 and 36 have been amended to recite that "first angle E is described by the equation:

$$E = (\tan(r_R/r_{camera}) + \alpha \cdot \tan(r_R/r_{camera}) + A)/2$$

where  $r_R$  is the radius of the rod,  $r_{camera}$  is the distance the mirror is placed from a camera,  $\alpha$  is a constant defining gain, and A is at least about 0.5°." Support for this amendment can be found, for example, on page 26 lines 17-26 of Applicants' specification. As explained on page 26:

"Angle E 116 may be formed with respect to a first plane perpendicular to the central axis of the mirror at a point of intersection between the rod and the mirror. Angle E is dependent upon angle A, which defined the lower limit of the controlled field of view. Equation (7) shows the relationship between angle E and angle A as:  $E = \frac{1}{2} (\tan(r_R/r_{camera}) + \alpha \cdot \tan(r_R/r_{camera}) + A)$ ."

It is submitted that claims 12 and 36 satisfy the requirements of 35 U.S.C. § 112, first paragraph.

Claims 1, 6, 12, 17, 25, 26, 36 and 38 presently stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. By the present amendment, claims 1 and 25 have been amended to recite, that the "mirror includes a convex reflective surface symmetric about the axis, the surface forming a first angle C with respect to a first plane perpendicular to the axis at a point of intersection between the axis and the mirror, the first angle C being at least 0.5°". It is submitted that amended claims 1 and 25 meet the requirements of 35 U.S.C. § 112, second paragraph.

In accordance with the Examiner's suggestions, claims 6, 17, 27 and 38 have been amended to recite "the surface further forms a second angle D with respect to a second plane perpendicular to the axis at an end of the mirror opposite the point of intersection between the axis and the mirror, and with respect to a plane tangent to the mirror surface at the end of the mirror." Support for this amendment can be found, for example, in Fig. 11. Accordingly, it is submitted that amended claims 6, 17, 27 and 38 satisfy the definiteness requirement.

Claims 12 and 36 have been amended to recite "the mirror includes a convex reflective surface symmetric about the axis, the surface forming a first angle E with respect to a first plane perpendicular to the axis at a point of intersection between the rod and the mirror, the first angle E described by the equation:

$$E = (\text{atan}(r_R/r_{\text{camera}}) + \alpha \cdot \text{atan}(r_R/r_{\text{camera}}) + A)/2$$

where  $r_R$  is the radius of the rod,  $r_{\text{camera}}$  is the distance the mirror is placed from a camera,  $\alpha$  is a constant defining gain, and A is at least about 0.5°." Support for this amendment can be found, for example, on page 26 lines 17-26 of Applicants' specification. It is submitted that amended claims 12 and 36 satisfy the requirements 35 U.S.C. § 112, second paragraph.

In view of the foregoing amendments and remarks, it is submitted that claims 1, 6, 12, 17, 25, 27, 36 and 38 satisfy the requirements of 35 U.S.C. § 112 and are patentable over the prior art. Accordingly, an early notice of allowance of this application is respectfully requested.

In the event that any outstanding matters remain in connection with this application, the Examiner is invited to telephone the undersigned at (412) 263-4362 to discuss such matters.

Respectfully submitted,



Lara A. Northrop  
Reg. No. 55,502  
Pietragallo, Bosick & Gordon  
One Oxford Centre, 38<sup>th</sup> Floor  
301 Grant Street  
Pittsburgh, PA 15219  
Attorney for Applicant(s)

Telephone: 412-263-4362